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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,383	04/20/2001	Doron Ben-Yehzekel	0008450-0002	2503

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EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT PAPER NUMBER

2155

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/839,383	Applicant(s) BEN-YEHEZKEL ET AL.	
	Examiner Victor Lesniewski	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☒ Claim(s) 7, 13 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been examined.
2. Claims 1-30 are now pending.

Specification

3. The disclosure is objected to because of the following informalities:
 - There is no mention of the drawing figures 2C and 3C although the reference numerals in these figures may be accounted for.

Appropriate correction is required.

Claim Objections

4. Claims 7, 13, and 27 are objected to because of the following informalities:
 - There are typographical errors where there are no periods at the end of claims 7 and 27.
 - There is a typographical error where claim 13 states “the computer program product of claim 1...”. Since claim 1 does not disclose a computer program product, claim 13 cannot depend on it. For the purpose of applying prior art it will be assumed that claim 13 reads “the computer program product of claim 11...”.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 21-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 21-30 recite descriptive material that may or may not be an embodiment of a computer system or embodied on a computer readable medium so as to be executable. Here, a protocol is an abstract idea and does not constitute eligible subject matter for patentability. See MPEP 2106.IV.B.1(a).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-9 and 11-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Wesley (U.S. Patent Number 6,076,114).

9. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a computer program product are rejected under the same rationale applied to the described claim.

10. Wesley has disclosed:

- <Claims 1 and 11>

A method for transmitting data across a medium comprising: determining an expected acknowledgment time (“ack timer” column 8, lines 57-59), a send delay interval time (“expected RTT/latency” column 8, lines 1-6), and a send timeout time (“RTT timer” column 7, lines 63-65); sending a series of ordered packets from a source to a destination (column 13, lines 58-65); receiving said ordered packets at said destination (column 13, line 65); sending an acknowledgment indicating a receipt of said ordered packets to said source (column 13, lines 65-67); adjusting said expected acknowledgment time, said send delay interval time, and said send timeout value, if necessary (column 14, lines 1-24); and re-sending one or more of said ordered packets using said send timeout time (column 15, lines 16-24).

- <Claims 2 and 12>

The method of claim 1 wherein said source is a client or a server (column 2, lines 9-12).

- <Claims 3 and 13>

The method of claim 1 wherein said destination is a client or a server (column 2, lines 9-12).

- <Claims 4 and 14>

The method of claim 1 wherein said step of adjusting comprises: increasing said send delay interval time if a number of packets in transit increases or a receive delay time increases (column 14, lines 1-24).

- <Claims 5 and 15>

The method of claim 1 wherein said step of adjusting comprises: decreasing said send delay interval time if a number of packets in transit decreases beyond a target or a receive delay time decreases (column 14, lines 35-62).

- <Claims 6 and 16>

The method of claim 1 wherein said step of adjusting comprises: sending said packet send timeout time to an expired time, if one of said packets is not acknowledged in order (column 11, line 65 through column 12, line 6).

- <Claims 7 and 17>

The method of claim 1 wherein said step of adjusting comprises: increasing said packet send timeout time for one or more subsequent packets, if all of said packets are acknowledged in order (column 12, lines 13-21).

- <Claims 8 and 18>

The method of claim 1 further comprising: determining an optimal size for said packets (column 9, lines 5-18).

- <Claims 9 and 19>

The method of claim 1 wherein said step of adjusting further comprises: smoothing a variance in said expected acknowledgment time, said send delay interval time, and / or said send timeout value by dampening said variance towards a prior value (column 6, lines 32-40).

Since all the limitations of the invention as set forth in claims 1-9 and 11-19 were disclosed by Wesley, claims 1-9 and 11-19 are rejected.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wesley, as applied above, in view of Fan et al. (U.S. Patent Number 6,219,706), hereinafter referred to as Fan

13. Wesley disclosed a system for reliable data transmission over communications networks. In an analogous art, Fan disclosed an access control system that controls traffic to and from a local network. As Fan discusses in the Background (column 1, line 1 through column 2, line 50), firewalls are well known in the art and have been used in data transmission systems based on a variety of well known protocols.

14. Although Wesley did not explicitly state that his system could adapt for usage with a firewall, Fan discusses extensively how packet transfer can be accomplished in a system with a firewall. Since the inventions encompass the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Wesley by adding the ability to adapt for usage with a firewall as provided by Fan. This would make sense because it would allow for an even greater reliability in data transmission by adding the security gained from utilizing a firewall in the network.

15. Thereby, the combination of Wesley and Fan discloses:

- <Claims 10 and 20>

The method of claim 1 wherein said step of sending further comprises:
determining if a firewall resides between said source and said destination;
restricting said packets to a range of ports; opening said range of ports on said
firewall; and sending said packets through said range of ports (Fan, column 7,
lines 5-10 and 41-46).

Since the combination of Wesley and Fan discloses all of the above limitations, claims 10
and 20 are rejected.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to the
applicant's disclosure.

- Jain (U.S. Patent Number 5,193,151) disclosed a system for delay-based
congestion avoidance in computer networks.
- Borella et al. (U.S. Patent Number 6,182,125) disclosed a method for improving
the perception of electronic content utilizing determined network latencies.
- Ben-David (U.S. Patent Number 6,273,622) disclosed a method for enhancing the
performance of TCP/IP applications and services.
- Thielke et al. (U.S. Patent Number 6,324,564) disclosed a communication system
including an enhanced communications transport protocol.
- Ogus (U.S. Patent Number 6,438,603) disclosed a method for simultaneous tuning
of reliable and non-reliable channels of a single network communications link
including a protocol that adapts a send rate based on varying link conditions.

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- Ogus (U.S. Patent Number 6,587,875) disclosed a method for optimizing the use of available bandwidth across a network under varying traffic conditions.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 703-308-6165. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 703-308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Victor Lesniewski
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